



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,026	07/31/2003	Jay Lahti	P0011616.00/LG10126	9661
27581	7590	10/06/2010		
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924			EXAMINER ALTER, ALYSSA MARGO	
			ART UNIT	PAPER NUMBER
			3762	
			NOTIFICATION DATE	DELIVERY MODE
			10/06/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

rs.docketingus@medtronic.com

sso@cardinal-ip.com

Office Action Summary

Application No.

10/632,026

Applicant(s)

LAHTI ET AL.

Examiner

Alyssa M. Alter

Art Unit

3762

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-17, 19-33 and 35-52 is/are pending in the application.
- 4a) Of the above claim(s) 49-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-17, 19-33 and 35-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed April 15, 2010 have been fully considered but they are not persuasive.

The Applicant argues that the clip disclosed by Anscher defines an opening parallel to the path of the cable it connects. However, as depicted in the figures, the connector clip is perpendicular to the insertion axis of the cable. Thus, the connector clip as disclosed by Anscher is oriented perpendicular to the insertion axis of orientation of the cable. Therefore, the claims remain rejected under Lim in view of Anscher as previously made of record.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1, 3-17, 19-33 and 35-48 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/632058 (US Patent Publication

20050027327 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because both have a connector assembly for detachably connecting a lead to an implantable medical device, comprising a deflectable connector clip including a first arm, a second arm, the connector clip capable of being deflected from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and a housing having a first member and a second member, the first member formed to be fixedly engaged with the second member to enclose the connector clip within the housing, wherein the connector clip is positioned within one of the first member and the second member.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. Claims 1, 3-17, 19-33 and 35-48 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10/632028 (US Patent Publication 20050027326 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because both have a connector assembly for detachably connecting a lead to an implantable medical device, comprising a deflectable connector clip including a first arm, a second arm, the connector clip capable of being deflected from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and a housing having a first

member and a second member, the first member formed to be fixedly engaged with the second member to enclose the connector clip within the housing, wherein the connector clip is positioned within one of the first member and the second member.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-17, 19-33 and 35-48 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 5,769,671) in view of Anscher et al. (US 4,566,660). Lim discloses a connector spring is radially deflectable and used to compress and engage two axially orientated electrical conductors together within a housing. "The spring is a metallic member having a general square shape as defined by four opposed sides each connected by a corner portion interposed therebetween and facing the central axis, and the spring on each side thereof having deformed portions which extend inwardly beyond the respective side face thereof and toward the central axis"(col. 2. lines 34-39). In figure 5, the examiner considers the contact spring to be a clip with 23b as the first arm, 23d as the second arm and 23c as the top portion. Since the spring is a metallic spring used to enhance electrical contact, the spring is thus electrically conductive.

"The connector more specifically comprises an elongated housing extending along a central axis, the housing has a generally cylindrical opening extending coaxially with the central axis. The opening in the housing is defined by first and second cylindrical surfaces each defined by a first diameter. An annular radially directed gap is disposed within the opening and is disposed axially between the first and second cylindrical surfaces, with the annular gap extending radially outwardly from the axis and beyond each of the first and second cylindrical surfaces. The gap has a given width as measured along the axis extending in the direction parallel thereto. A contact spring is provided and has a generally closed shape and is of a width sufficient to be received within the gap and has portions thereof extending inwardly toward the axis and into the opening"(col. 2, lines 12-26). "The opening 10 in the housing 4 has an interrupted inner surface as defined by concentric first and second axially spaced cylindrical inner surfaces 12 and 14, respectively, together defining an annular radially directed gap 16 therebetween"(col. 3, lines 21-25).

"The annular gap in the housing is defined by an annular shoulder formed in the inner surface of the housing, the shoulder defines one of the first and second surfaces of the first diameter and defining a stepped annular surface of a second diameter wider than the opening and a collar member received within the second diameter in abutment against the spring". The examiner considers the shoulder to be a support ridge.

As to the first, second and third positions and distances of the clip, "The sheet metal forming this spring 2 has a thickness of about 0.003 inches and is a generally closed shape member defined by opposed free ends 31 and 33, which in the relaxed

condition, define a gap referenced in FIG. 5 as 29. In the assembled condition of the connector and before the lead is introduced into the opening 10, the free ends of the spring maintain a spacing of approximately 0.005 inch" (col. 4, lines 27-33). Lim discloses that the gap 29 is approximately 0.005 inch when placed in the housing, before the introduction of a lead. Therefore, the second position is at a distance of approximately 0.005 inch and a third position is at a larger distance after the insertion of a lead. The third position will inherently create a larger gap since that will enable the spring to compress the lead. As to a first position, the examiner considers the relaxed condition of the spring to be the first position.

As to claims 3-4, Lim discloses in col. 3, lines 14-17, "the connector housing is formed from a conductive material, namely, rolled stainless steel, and is electrically connected to the electrical components of the pulse generator".

Although Lim is silent about the location of the housing, the examiner considers Lim to disclose a connector block and port, since Lim discloses the use of the connector spring with implantable medical devices, such as pacemakers. It is well known that pacemakers often have connector blocks and connector ports to engage the medical leads. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection device as taught by Lim with a connector block and connector port since it was known in the art to employ connector blocks and ports in order to engage a medical lead into an implantable medical device.

Lim discloses the claimed invention except for the offset and partially overlapping free ends. Anscher et al. discloses an engagement clip with and without overlapping

ends (see figures 4 and 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the free ends of the clip in Lim to overlap as taught by Anscher et al. in order to provide the predictable results of reinforcement to support and engage a lead.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Alter whose telephone number is (571)272-4939. The examiner can normally be reached on M-F 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Niketa Patel can be reached on (571) 272-4156. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Niketa I. Patel/
Supervisory Patent Examiner, Art Unit 3762

/Alyssa M Alter/
Examiner
Art Unit 3762